

CITY OF TEMPE, ARIZONA  
PUBLIC WORKS DEPARTMENT  
DIVISION OF ENGINEERING

**CONTRACT FOR PROFESSIONAL SERVICES**

This Contract is made and entered into on the 12th day of February, 2015, by and between the City of Tempe, an Arizona municipal corporation (“City”), and **CDM Smith, Inc.**, a Massachusetts corporation (“Consultant”).

City engages Consultant to perform professional services for a project known and described as **TP-01, TP-04, and TP-05 Metering Station Improvements**, Project No. **3202551** (“Project”).

**1. SERVICES OF CONSULTANT**

Consultant shall perform the following professional services to City in conformance with applicable professional standards and in accordance with the degree of care and skill that a registered professional in Arizona would exercise under similar conditions:

- 1.1. Consultant shall provide professional services, as described in Exhibit “A” attached.
- 1.2. Consultant has assigned Leonel Almanzar as the project manager for this Contract. Prior written approval by City is required in the event Consultant needs to change the project manager. Consultant shall submit the qualifications of the proposed substituted personnel to City for approval prior to any substitution or change.
- 1.3. Consultant shall prepare and submit a detailed opinion of probable cost of the Project.
- 1.4. Consultant shall follow and comply with the Arizona Utility Coordinating Committee’s Public Improvement Project Guide and the City’s Utility Permit and Construction Manual, latest revisions, as directed by City.
- 1.5. Consultant shall prepare plans and technical specifications per the requirements of the applicable chapters of the City’s Engineering Design Criteria Manual, latest revision, and the Maricopa Association of Governments (MAG) Uniform Standard Details for Public Works Construction as amended by City. All plans shall be prepared on CADD as required by City. The final original plans shall be submitted on 3 ml double matte black line mylar and shall be 24” x 36” in size.
- 1.6. Consultant shall submit all final construction documents in both hard copy and electronic format. Plans shall be MicroStation or AutoCAD compatible and all other documents shall be Microsoft Office compatible. The software version used

shall be compatible to current City standards. Other support documents, for example, structural calculations, drainage reports and geotechnical reports, shall be submitted in hard copy only.

- 1.7. Consultant shall obtain all necessary permits and licenses required for the performance of its work. Failure of Consultant to obtain said permits prior to the commencement of its work shall constitute a breach of this Contract.
- 1.8. Consultant shall perform the work in a manner and at times which do not impede or delay City's operations and/or functions.
- 1.9. Consultant shall be solely responsible for any repair, replacement, remediation and/or clean-up of any damage done by Consultant including any impairment of access to City or other lawful invitees, by such work performed on this Project.

**2. TERM OF CONTRACT**

Consultant shall complete all services by August 15, 2015. In the event delays are experienced beyond the control of Consultant, the schedule may be revised as determined by City in its sole discretion, and pursuant to Section 3, Consultant's Compensation.

**3. CONSULTANT'S COMPENSATION**

- 3.1. The method of payment for this Contract is payment by installments. Total compensation for the services performed shall not exceed \$148,330.00, unless otherwise authorized by City.
- 3.2. Payment for this Contract shall be based on the following Budget Schedule:

<u>Task Description</u>	<u>Method</u>	<u>Amount</u>
Design Services	Hourly, Not to Exceed	\$140,790.00
<b>Subtotal Task Amount:</b>		<b>\$140,790.00</b>
<u>Allowances</u>	<u>Method</u>	<u>Amount</u>
Additional Services	Not to Exceed	\$7,040.00
Reimbursable Expenses	Not to Exceed	\$500.00
<b>Subtotal Allowances Amount:</b>		<b>\$7,540.00</b>
<b>Total Compensation Not to Exceed:</b>		<b>\$148,330.00</b>

- 3.3. City shall pay Consultant by installments, each installment based upon monthly progress reports and related, detailed invoices submitted by Consultant. Submittals shall be based on the Budget Schedule and shall include supporting documentation for all Allowances. Invoices shall include job titles and hourly

rates when applicable. Hourly rates are established in the attached Exhibit "A" incorporated hereby by this reference and are in effect for the entire Contract term unless City provides written authorization for an hourly rate increase. Consultant shall not exceed any of the specified budget amounts for any Task or Allowance without prior written authorization from City. City may provide written authorization for the transfer of budget amounts between any of the Tasks or Allowances provided the total Contract amount does not exceed the amount indicated in Section 3.1.

- 3.4. If detailed invoice(s) and progress report(s) are approved by City, installment payments will be made within thirty (30) days after City's approval.
- 3.5. Consultant acknowledges and agrees that invoices shall be submitted to City for review and approval no more than sixty (60) days after work or services have been performed. City reserves the right to deny in whole or in part, payment to Consultant, including but not limited to, fees and expenses contained in any invoice not received by the City within sixty (60) days of the date such work or services were performed. This in no way shall be construed to waive or diminish City's rights and remedies for otherwise withholding funds under Arizona law.

#### **4. CITY'S RESPONSIBILITIES**

- 4.1. City shall designate a project manager during the term of this Contract. The project manager has the authority to administer this Contract and shall monitor compliance with all terms and conditions stated herein. All requests for information from or a decision by City on any aspect of the work shall be directed to the project manager.
- 4.2. City shall review requests for information related to the Project by Consultant and will endeavor to provide a prompt response to minimize delay in the progress of Consultant's work. City will also endeavor to keep Consultant advised concerning the progress of City's review of the work. Consultant agrees that City's inspection, review, acceptance or approval of Consultant's work shall not relieve Consultant of its responsibility for errors or omissions of Consultant or its subconsultant(s).
- 4.3. Unless included in Consultant's services as identified in Section 1, City may furnish with or without charge, upon Consultant's reasonable request, the following information to the extent it is within City's possession or control:
  - 4.3.1. One copy of its maps, records, laboratory tests, survey ties, and benchmarks, or other data pertinent to the services. However, Consultant shall be solely responsible for searching the records and requesting specific drawings or information and independently verifying said information.

- 4.3.2. Available City data relative to policies, regulations, standards, criteria, studies, etc., relevant to the Project.
- 4.3.3. When required, title searches, legal descriptions, detailed ALTA Surveys, and environmental assessments.

## **5. TERMINATION AND DEFAULT**

- 5.1. City shall be entitled to terminate this Contract at any time, in its discretion. In addition, City may terminate this Contract for default, non-performance, breach or convenience, or abandon any portion of the Project for which services have not been fully or properly performed by Consultant. Termination shall be commenced by delivery of written notice delivered to Consultant, personally or by certified mail at 4835 E. Cactus Road, Suite 360, Phoenix, Arizona 85254. Termination shall be effective upon fourteen (14) days of delivery of notice to Consultant. In addition, this Contract may be terminated pursuant to A.R.S. § 38-511.
- 5.2. Upon the occurrence of Consultant's default, non-performance or breach of the Contract, City may recover any and all damages permitted by law or in equity against Consultant, in addition to termination of the Contract, including but not limited to compensatory damages, together with all costs and expenses as set forth in Section 12 herein.
- 5.3. In the event of Consultant's default, non-performance or breach, City agrees to, before exercising any right or remedy available to it, give Consultant written notice of the default, non-performance or breach. For the thirty (30) days following such notice, Consultant shall have the right to cure such default, non-performance or breach.
- 5.4. If Consultant fails to cure, immediately after receiving notice of termination from City, Consultant shall discontinue performance under this Contract and proceed to close said operations under this Contract. Consultant shall submit a detailed breakdown of completed work to City for evaluation. City shall have the right to inspect Consultant's work to analyze the services completed. Payment to Consultant shall be determined by City upon approval or disapproval of the services completed as of the date of delivery of notice of termination, and pursuant to Section 5.9.
- 5.5. Within ten (10) days of receipt of notice of termination as set forth herein, Consultant shall deliver to City all drawings, special provisions, field survey notes, reports, estimates and any and all other documents or work product generated by Consultant under the Contract, entirely or partially completed, together with all unused materials supplied by City.

- 5.6. In the event of such termination or abandonment, Consultant shall be paid only for those services performed in a good and workmanlike manner, in accordance with all plans, specifications and governmental requirements completed prior to receipt of said notice of termination, subject to approval by City. To the extent permitted by this Contract, such payment may include reimbursable expenses then incurred by Consultant, in City's sole discretion.
- 5.7. If the remuneration scheduled hereunder is based upon a fixed fee or definitely ascertainable sum, the portion of such sum payable shall be proportionate to the percentage of services completed by Consultant as determined and approved by City based upon the scope of work set forth in Exhibit "A." However, in no event shall the fee exceed that set forth in Section 3 of this Contract.
- 5.8. City shall make a determination as to approval or denial of any requested final payment within sixty (60) days after Consultant has delivered the last of the completed items and the final appraisal has been submitted to City.
- 5.9. The parties agree that in the event of any damages suffered by City as a result of any inexcusable delay, default, non-performance or breach by Consultant, Consultant agrees to reimburse City ten percent (10%) of the Contract amount per Section 3.1 for damages caused by its delay. This sum may be deducted from Consultant's payment or anticipated payment for failure to deliver and/or perform as specified. No premium will be awarded to Consultant for delivery and/or performance within the Contract term. Waiver by City of any of the provisions contained in this Section 5.9, or by way of the extension of the Contract term, shall in no way be deemed to waive or diminish City's rights available by law or in equity under the Contract.

## 6. INSURANCE

Without limiting any obligations or liabilities, Consultant, at its sole expense, shall purchase and maintain the minimum insurance specified below with companies duly licensed or otherwise approved by the State of Arizona, Department of Insurance, and with forms reasonably satisfactory to City. Each insurer shall have a current A.M. Best Company, Inc. rating of not less than A-VII. Use of alternative insurers requires prior approval from City.

### 6.1. General Clauses

- 6.1.1. Additional Insured. The insurance coverage, except workers' compensation and professional liability, required by this Contract, shall name City, its agents, representatives, directors, officials, and employees, as additional insured, and shall specify that insurance afforded Consultant shall be primary insurance, and that any self insured retention and/or insurance coverage carried by City or its employees shall be excess coverage, and not contributory coverage to that provided by Consultant. This provision and the naming of the City as an additional insured shall in

no way be construed as giving rise to responsibility or liability of the City for applicable deductible amounts under such policy(s).

- 6.1.2. Coverage Term. All insurance required herein shall be maintained in full force and effect until services required to be performed under the terms of this Contract are satisfactorily completed and formally accepted; failure to do so shall constitute a material breach of this Contract.
- 6.1.3. Primary Coverage. Consultant's insurance shall be primary insurance as respects City, and any insurance or self insurance maintained by City shall be in excess of Consultant's insurance and shall not contribute to it.
- 6.1.4. Claim Reporting. Consultant shall not fail to comply with the claim reporting provisions of the policies or cause any breach of a policy warranty that would affect coverage afforded under the policy to protect City.
- 6.1.5. Waiver. The policies for workers' compensation and general liability shall contain a waiver of transfer rights of recovery (subrogation) against City, its agents, representatives, directors, officers, and employees for any claims arising out of the work of Consultant.
- 6.1.6. Deductible/Retention. The policies may provide coverage, which contains deductibles or self-insured retentions. Such deductible or self-insured retentions shall not be applicable with respect to the coverage provided to City under such policies. Consultant shall be solely responsible for deductible or self-insured retentions and City may require Consultant to secure the payment of such deductible or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.
- 6.1.7. Policies and Endorsements. City reserves the right to request and to receive, within ten (10) working days, information on any or all of the above policies or endorsements.
- 6.1.8. Certificates of Insurance. Prior to commencing services under this Contract, Consultant shall furnish City with certificates of insurance, or formal endorsements as required by the Contract, issued by Consultant's insurer(s), as evidence that policies providing the required coverages, conditions, and limits required by this Contract are in full force and effect. Such certificates shall identify this Contract by referencing the Project number and/or Project name and shall provide for not less than thirty (30) days advance written notice by certified mail to City of cancellation or termination of insurance.

6.1.9. Subconsultants/Contractors. Consultant shall include all subconsultants and subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subconsultant and subcontractor.

6.2. Workers' Compensation. Consultant shall carry workers' compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant's employees engaged in the performance of the services; and employer's liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

In case services under this Contract are subcontracted, Consultant shall require all subconsultant(s) to provide workers' compensation and employer's liability to at least the same extent as provided by Consultant.

6.3. Automobile Liability. Consultant shall carry commercial/business automobile liability insurance with a combined single limit for bodily injury and property damages of not less than \$1,000,000 each occurrence regarding any owned, hired, and non-owned vehicles assigned to or used in performance of Consultant services. Coverage will be at least as broad as coverage Code 1 "any auto" (Insurance Service Office policy form CA 0001 1/87 or any replacements thereof). Such coverage shall include coverage for loading and unloading hazards.

6.4. Commercial General Liability. Consultant shall carry commercial general liability insurance with a combined single limit of not less than \$1,000,000. The policy shall be primary and include coverage for bodily injury, property damage, personal injury, products, completed operations, and blanket contractual covering, but not limited to, the liability assumed under the indemnification provisions of this Contract, which coverage will be at least as broad as Insurance Service Office policy form CG 0002 1-11-88 or any replacement thereof.

In the event the general liability insurance policy is written on a "claims made" basis, coverage shall extend for two (2) years past completion and acceptance of the services as evidenced by annual certificates of insurance.

Such policy shall contain a "severability of interests" provision (also known as "cross liability" and "separation of insured").

6.5. Professional Liability. Consultant retained by City to provide the engineering services required by the Contract will maintain professional liability insurance covering errors and omissions arising out of the services performed by Consultant or any person employed by it, with an unimpaired limit of not less than \$1,000,000 each claim and \$1,000,000 all claims, or 10% of the construction budget, whichever is larger. In the event the insurance policy is written on a "claims made" basis, coverage shall extend for two (2) years past completion and acceptance of services as evidenced by annual certificates of insurance.

- 6.6. Property Coverage – Valuable Papers. Consultant shall carry property coverage on all-risk, replacement cost, agreed amount form with valuable papers insurance sufficient to assure the restoration of any documents, memoranda, reports, or other similar data relating to the services of Consultant used in the completion of this Contract.

## **7. HEALTH INSURANCE REQUIREMENTS**

- 7.1. Consultant must certify that it has or will offer health insurance to all eligible employees working on services set forth in this Contract prior to the performance of any work or services. An affidavit certifying such offering must be signed in a form approved by City. All required health insurance must be maintained during the entire time of the Contract with City. Health insurance pursuant to this Section 7 is not required for temporary employees or students working part-time who are enrolled in a recognized educational institution.
- 7.2. The health insurance requirements herein shall apply to all of Consultant's eligible employees directly involved with the services set forth in this Contract, including support and administrative personnel.
- 7.3. Any and all complaints concerning violations of the health insurance requirements shall be filed, in writing, with the City's Public Works Department, within thirty (30) days from discovery of a potential violation. An administrative hearing will be held before the Public Works Manager, and a written decision of findings will be provided to the parties to the hearing within ten (10) days thereafter. Appeal from the decision of the Public Works Manager may be made within ten (10) days of the date of the decision by filing a notice of appeal in writing with the Public Works Department. If an appeal is timely filed, an administrative hearing will be held before an administrative hearing officer appointed by the City Manager. The decision of the administrative hearing officer shall be final.
- 7.4. Penalties for failing to comply with this Section 7 include, but are not limited to the following: Consultant may be barred from bidding on, or entering into any Public Works contract with City for a period of three (3) years from the execution of the Contract.
- 7.5. All Consultants subject to the health insurance requirements shall post in English, notice of the health insurance requirements at their office and at the job site.

## **8. WORK FOR HIRE AND OWNERSHIP OF DELIVERABLES**

- 8.1. Consultant shall ensure that all the results and proceeds of Consultant's and any and all work on the Project and any related projects, including that of all agents, employees, officers, and contractors, shall be owned by City, including the copyright thereto, as work for hire. In the event, for any reason, such results and proceeds are not deemed work for hire, Consultant shall be deemed hereby to

have assigned to City all of its right, title and interest in such results and proceeds and content to City, without limitation.

- 8.2. All work products (electronically or manually generated), including but not limited to plans, specifications, cost estimates, tracings, studies, design analyses, original mylar drawings, computer aided drafting and design (CADD) file diskettes which reflect all final drawings, and other related products which are prepared in the performance of this Contract, are the property of City and are to be delivered to City on the particular type of storage media on which they are stored (e.g. CD, thumb drive, etc.) before the final payment is made to Consultant. City shall retain ownership of these original works. If approved in writing by City, Consultant may retain the originals and supply City with reproducible copies of the work.

## **9. CONFLICT OF INTEREST**

- 9.1. Consultant agrees to promptly disclose any and all financial and/or economic interest in the property, or any property affected by the work, or the Project itself other than as set forth herein, existing prior to the execution of this Contract. Further, Consultant agrees to promptly disclose any financial or economic interest in the Project property or any property affected by the work, if Consultant gains such interest during the course of this Contract.
- 9.2. If Consultant gains any financial or economic interest in the Project during the course of this Contract, this may be grounds for terminating this Contract at the sole discretion of City.
- 9.3. Consultant shall not engage the services on this Contract of any present or former City employee who was involved as a decision-maker in the selection or approval processes, or who negotiated or approved billings or contract modifications for this Contract.
- 9.4. Consultant agrees that it shall not perform services on this Project for any other contractor, subcontractor, or any supplier, other than City. In addition, Consultant shall not negotiate, contract, or make any agreement with a contractor, subcontractor, or any supplier with regard to any of the work under this Contract, or any services, equipment or facilities to be used on this Project other than with City.

## **10. COVENANT AGAINST CONTINGENT FEES**

Consultant affirms that it has not employed or retained any company or person, other than a bona fide employee working for Consultant to solicit or secure this Contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Contract. For breach or violation of this clause, City may terminate this

Contract without liability, or in its discretion may deduct from the Contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage brokerage fee, gift, or contingent fee.

#### **11. INDEMNIFICATION**

To the fullest extent permitted by law, Consultant shall defend, indemnify and hold harmless City, its agents, officers, officials, and employees from and against all claims, damages, losses, liability and/or expenses, relating to, or arising out of, the negligent acts, errors, mistakes or omissions in the work, services, or professional services of Consultant, its agents, employees, or any other person for whose negligent acts, errors, mistakes or omissions in the work, services, or professional services Consultant may be deemed legally liable in the performance of this Contract, or any breach of the Contract. Consultant's duty herein shall arise in connection with any and all claims for damage, loss, liability and/or expenses attributable to bodily injury, sickness, disease, death, or injury to, impairment or destruction of any person or property including loss of use resulting therefrom. The amount and type of insurance coverage requirement set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

#### **12. DISPUTE RESOLUTION**

In the event of a dispute concerning or in any way connected to the Contract or subject Project, the parties agree that the unsuccessful party shall pay to the prevailing party a reasonable sum for attorneys' fees, including taxable and non-taxable costs, fees, costs and disbursements of experts, professionals, paralegals, whether at trial, appeal and/or in bankruptcy court, all of which will be deemed to have accrued on the commencement of such action and shall be enforceable whether or not such action is prosecuted to judgment. In addition, should City retain and/or utilize legal counsel as a result of a breach by Consultant of any term, covenant or provision of this Contract, in addition to paying any recovery owed to City and/or performing any obligation remaining to be performed, in order to fully cure such breach or default, Consultant shall reimburse City for reasonable attorneys' fees, taxable and non-taxable costs and disbursements, incurred by City in enforcing Consultant's obligations, whether or not a legal action is commenced, including but not limited to the cost of preparing and presenting default notices, demand letters and similar non-judicial enforcement activities.

#### **13. ADDITIONAL SERVICES**

Additional services which are outside the scope of basic services contained in this Contract shall not be performed by Consultant without prior written authorization from City, at City's sole discretion. Additional services, when authorized by an executed contract or an amendment to this Contract shall be compensated for by a fee mutually agreed upon between City and Consultant.

#### **14. PROHIBITION ON ASSIGNMENT**

This Contract and all duties and obligations of Consultant set forth in this Contract shall not be

assignable except by prior written consent of City, and such prohibition shall extend to and be binding upon the heirs, executors, administrators, successors, and assigns of Consultant.

## 15. MISCELLANEOUS PROVISIONS

- 15.1. Lawful Presence in the United States. Pursuant to A.R.S. §1-502, any individual/sole proprietor who applies for local public benefits by signing this Contract shall also sign a sworn affidavit (Exhibit B) and present one of the documents listed on the affidavit to verify lawful presence in the United States. This Contract shall not be fully executed by the City if the individual/sole proprietor fails to sign the affidavit and present one of the listed documents.
- 15.2. Equal Opportunity. City is an equal opportunity, affirmative action employer. Consultant hereby covenants for itself, its employees, agents, assigns and all persons claiming under or through it, that it shall not discriminate unlawfully against any employee or applicant for employment, nor shall it deny the benefits of this Contract, to any person on the basis of race, color, creed, religion, ancestry, national origin, physical or mental disability, age, sex, gender, sexual orientation, gender identity, marital status, or veteran status with regard to discharging obligations under this Contract. Consultant covenants and agrees that it will comply in all respects with the applicable provisions of the Executive Order 11246, Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act, the Age Discrimination in Employment Act, the Vietnam Era Veterans' Readjustment Assistance Act, the Rehabilitation Act, and any other applicable state and federal statutes governing equal opportunity. Consultant agrees to post hereinafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the contracting officer setting for the provisions of this clause.
- 15.3. Antidiscrimination. Consultant shall not refuse to hire or employ or bar or discharge from employment any person, or discriminate against such person in compensation, conditions, or privileges of employment because of race, color, gender, gender identity, sexual orientation, religion, national origin, familial status, age, disability, or United States military veteran status. Consultant shall provide a copy of its antidiscrimination policy to City to confirm compliance with this requirement or attest in writing to compliance (Exhibit C).
- 15.4. Legal Compliance. Consultant agrees and covenants that it will comply with any and all applicable governmental restrictions, regulations and rules of duly constituted authorities having jurisdiction insofar as the performance of the work and services pursuant to the Contract, and all applicable safety and employment laws, rules and regulations, including but not limited to, the Fair Labor Standards Act, the Walsh-Healey Act, and the Legal Arizona Workers Act (LAWA), and all amendments thereto, along with all attendant laws, rules and regulations. Consultant acknowledges that a breach of this warranty is a material breach of this Contract and Consultant is subject to penalties for violation(s) of this

provision, including termination of this Contract. City retains the right to inspect the documents of any and all consultants, subconsultants and sub-subconsultants performing work and/or services relating to the Contract to ensure compliance with this warranty. Any and all costs associated with City inspection are the sole responsibility of Consultant. Consultant hereby agrees to indemnify, defend and hold City harmless for, from and against all losses and liabilities arising from any and all violations thereof.

- 15.5. Specially Designated Nationals and Blocked Persons List. Consultant represents and warrants to City that neither Consultant nor any affiliate or representative of Consultant (i) is listed on the Specially Designated Nationals and Blocked Persons List maintained by the Office of Foreign Asset Control, Department of the Treasury (OFAC) pursuant to Executive Order No. 13224, 66 Fed.Reg. 49079 (“Order”); (ii) is listed on any other list of terrorists or terrorist organizations maintained pursuant to the Order, the rules and regulations of OFAC or any other applicable requirements contained in any enabling legislation or other related Order(s); (iii) is engaged in activities prohibited in the Order; or (iv) has been convicted, pleaded *nolo contendere*, indicted, arraigned or custodially detained on charges involving money laundering or predicate crimes to money laundering.

Consultant further agrees to include the provisions set forth in Sections 15.1 through 15.4 in any and all subcontracts hereunder. Any violation of such provisions shall constitute a material breach of this Contract.

- 15.6. Effective Date. This Contract shall be in full force and effect only when it has been approved by the City Council of the City of Tempe, Arizona and when executed by the duly authorized City officials and the duly authorized agent of Consultant.
- 15.7. Governing Law. This Contract shall be governed and interpreted by the laws of the State of Arizona.
- 15.8. Exhibits. All exhibits attached to this Contract are made a part of and are incorporated into, this Contract. If any inconsistencies exist between this Contract and any exhibit hereto, the terms of this Contract shall govern.
- 15.9. Force Majeure. Any prevention, delay or stoppage of this Project for a cause beyond the reasonable control of Consultant due to acts of God, acts of war or terrorism, fire or other casualty, shall, notwithstanding anything to the contrary contained herein, excuse the performance of Consultant, for a period equal to such prevention, delay or stoppage. For purposes of this Section 15.9, a cause shall not be deemed beyond a party’s control if it is within the control of such party’s agents, employees, assigns, contractors or subcontractors.
- 15.10. Entire Agreement. This Contract contains all of the agreements of the parties with respect to the Project and related matters, and no prior agreement,

negotiations, postings, offerings, or understanding pertaining to any such matter shall be effective for any purpose unless expressly contained herein.

- 15.11. Consultant's Good Standing. Consultant hereby warrants and represents that it is a Massachusetts corporation, licensed to do business in the state of Arizona and currently in good standing, and that it is not now in violation of any agreement, instrument, contract, law, rule or regulation by which Consultant is bound.
- 15.12. Independent Contractor. Nothing contained in this Contract shall be deemed or construed by the parties hereto or otherwise, to create the relationship of principal and agent, partnership, joint venturer, employer and employee, or any association between City and Consultant. Consultant is an independent contractor and shall be solely responsible for any unemployment or disability insurance payments, or any social security, income tax or other withholdings, deductions or payments that may be required by federal, state or local law with respect to any compensation paid to Consultant hereunder or for any and all services or materials provided by or rendered to Consultant hereunder in connection with the work set forth in this Contract.
- 15.13. Severability. If any provision of this Contract shall, to any extent, be determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Contract shall not be affected thereby, and every other term and provision of this Contract shall be valid and enforceable to the fullest extent permitted by law.
- 15.14. Time is of the Essence. Time is of the essence in this Contract and each and every provision herein, except as may expressly be provided in writing by City.
- 15.15. No Waiver. No breach or default hereunder shall be deemed to have been waived City, except by a writing to that effect signed on behalf of City. No waiver of any such breach or default shall operate as a waiver of any other succeeding or preceding breach or default or as a waiver of that breach or default after written notice thereof and demand by City for strict performance of this Contract. Acceptance of partial or delinquent payments or performance shall not constitute the waiver of any right of City.
- 15.16. Survival. Any and all representations, obligations, indemnities, warranties, covenants, conditions and agreements contained in this Contract which are expressed as surviving the expiration or earlier termination of this Contract, or by their nature, are to be performed, observed or survive, in whole or in part, after the termination or expiration of this Contract term, shall survive the termination or expiration of this Contract.
- 15.17. Retention of Records. City, through any authorized representative, will have access to and the right to examine and copy all records, books, papers or documents related to services rendered under this Contract. Consultant will retain

all books and records related to the services performed for a period of not less than the greater of any applicable federal law retention requirement or five (5) years following termination of this Contract.

- 15.18. Antitrust Violations. City and Consultant recognize that in actual economic practice overcharges resulting from antitrust violations are in fact borne by City. Therefore, Consultant assigns to City any and all claims for such overcharges. Consultant in all subcontracts shall require all subcontractors to likewise assign all claims for overcharges to City.
- 15.19. Headings. The heading use in this Contract is for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.
- 15.20. No Construction Against Drafting Party. Each party acknowledges that it has had an opportunity to review the Contract with counsel, and such documents shall not be construed against any party that is determined to have been the drafter of the documents.
- 15.21. Notices to Parties:

All notices pursuant to this Contract shall be made in writing and delivered or mailed by certified mail to the parties at the following addresses:

CITY:

Andy Goh, City Engineer  
City of Tempe  
Public Works/Engineering Dept.  
P.O. Box 5002  
Tempe, AZ 85280

CONSULTANT:

\_\_\_\_\_  
(Printed Name of Signatory)  
CDM Smith, Inc.  
4835 E. Cactus Road, Suite 360  
Phoenix, AZ 85254

- 15.22. Non-Appropriation of Funds. If funds appropriated by the City Council or otherwise allocated to perform the work becomes unavailable for payment by City under this Contract, City may delay the work for a period up to six (6) months, after which date if no funds are legally available, City may terminate the Contract at City's sole option. In case of any such delay by City, Consultant may suspend performance of work or services as applicable. However, nothing herein shall be construed to allow termination of the Contract by Consultant for such delay.
- 15.23. GIS Data Disclaimer. THE CITY OF TEMPE DOES NOT WARRANT THE ACCURACY, COMPLETENESS, CONDITION, SUITABILITY, PERFORMANCE, OR CURRENCY OF THE GIS DATA PROVIDED UNDER THIS CONTRACT. AREAS DEPICTED BY GIS DATA ARE APPROXIMATE, AND NOT GUARANTEED TO BE ACCURATE TO STANDARDS FOR MAPPING, SURVEYING OR ENGINEERING. THIS DATA IS FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD NOT BE RELIED UPON FOR SITE-SPECIFIC PURPOSES. THE DATA HEREIN IS

SUBJECT TO CONSTANT CHANGE AND MAY NOT BE COMPLETE, ACCURATE OR UP-TO-DATE. THE CITY OF TEMPE IN NO WAY ASSUMES LIABILITY OR RESPONSIBILITY FOR ANY INCORRECT DATA OR ANY INFORMATION PROVIDED HEREIN. THE CONSULTANT ACKNOWLEDGES AND AGREES THAT THE CITY OF TEMPE ASSUMES NO LIABILITY FOR DAMAGES INCURRED DIRECTLY OR INDIRECTLY RESULTING FROM INCOMPLETE, INCORRECT OR MISSING INFORMATION; INCLUDING ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED OR UNDER ANY THEORY OF LIABILITY, WHETHER IN TORT, CONTRACT, STRICT LIABILITY OR OTHERWISE. **BY WAY OF THE SIGNATURE ON THIS CONTRACT, THE CONSULTANT ASSUMES ALL LIABILITY FOR ANY AND ALL DEPENDENCE AND/OR RELIANCE UPON THIS INFORMATION AND ASSUMES ALL RESPONSIBILITY RELATING THERETO. ANY AND ALL EXPRESSED OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PURPOSE ARE SPECIFICALLY AND EXPRESSLY DISCLAIMED.** CONSULTANT SHOULD NOT RELY UPON THE GIS DATA WITHOUT PROPER FIELD VERIFICATION FOR ANY PURPOSE.

[SIGNATURE PAGE TO FOLLOW]

**TP-01, TP-04, and TP-05 Metering Station Improvements  
Project No. 3202551**

DATED this 12th day of February, 2015.

CITY OF TEMPE, ARIZONA

By: \_\_\_\_\_  
Mayor

By: \_\_\_\_\_  
Public Works Director

ATTEST:

Recommended By:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Deputy PW Director/City Engineer  
*Ar*

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

**Consultant warrants that the person who is signing this Contract on behalf of Consultant is authorized to do so and to execute all other documents necessary to carry out the terms of this Contract.**

CONSULTANT  
CDM Smith, Inc.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Federal I.D. No./Social Security No.

# EXHIBIT A



4835 East Cactus Road, Suite 360  
Phoenix, Arizona 85254  
tel: 602 281-7900  
fax: 602 867-9620

December 19, 2014

City of Tempe  
Attn: Ken Snow, PE – Senior Civil Engineer  
Public Works Department  
31 East Fifth Street  
Tempe, AZ 85281

Subject: City of Tempe Metering Stations TP-01, TP-04, TP-05: Engineering Services

Dear Mr. Snow:

CDM Smith is pleased to submit this proposal for engineering services to City of Tempe for the design upgrade in Metering Stations TP-01, TP-04, and TP-05. This scope of work is based on information provided by the City of Tempe (City), as well as our joint project discussion and site visit on November 14, 2014.

The Metering Stations upgrade will mainly consist of covering the flumes to improve safety and air quality for routine maintenance and inspection entry of the facilities. This proposal includes engineering services for the upgrade design, as well as bid assistance to the City.

CDM Smith proposes a not to exceed amount (N.T.E.) contract of 148,330 with an anticipated engineering services duration of 13 weeks for design and 12 weeks for assistance during bidding process.

CDM Smith appreciates the opportunity to work with the City of Tempe on this important project. CDM Smith is very excited about this opportunity to team with the City's staff in delivering a successful project. Please feel free to contact Leonel at 602-281-7856 or Raul Aviles, should you have any questions. We would be happy to meet with you to review our scope of services in detail.

Very truly yours,

Raul E. Aviles Jr. PE, CPE, CEM, GBE  
Principal-In-Charge

Leonel I. Almanzar, PhD, PE  
Project Manager



1/5/15



Mr. Ken Snow  
December 19, 2014  
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## TP-01, TP-04 & TP-05 Engineering Services Proposal

This proposal includes the following information presented below:

1. Project understanding and scope of work
2. Project tasks and deliverables
3. Project team and organization
4. Assumptions
5. Management control program
6. Proposed schedule
7. Project fee

### **1. Project Understanding and Scope of Work**

The City of Tempe is planning on modifying the Metering Stations TP01, TP04, and TP05 by covering the flume to improve safety and air quality for routine maintenance and inspection entry of the facilities. The facilities are currently operating with ventilation systems that force the pressurized air in the room and out through the flume. Therefore, in order to cover the flume, it will be required to evaluate and design the upgrades required for the ventilation system. All flume equipment access requirements will be maintained and coordinated with the new flume covers.

CDM Smith will develop the flume cover improvements, including mechanical and electrical coordination and design.

- CDM Smith will design new structural cover system and coordinate all required access to equipment and instruments.
- CDM Smith will evaluate the existing ventilation mechanical system and design the new required exhaust system including ductworks, fan, and louvers.
- CDM Smith will evaluate the available electrical system for the new equipment.
- CDM Smith will supplement and develop the specifications for hard bid construction of the proposed improvements where MAG specifications, including the City of Tempe modifications, do not adequately address construction methods and needs.
- CDM Smith will provide bid assistance to the City, assuming the projects may be bid as three separate packages.

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## 2. Project Tasks and Deliverables

### **Task 1.0 Data Collection**

- 1.1 Scoping and Kick-off Meeting
- 1.2 Data Collection/Record Research and Review
- 1.3 Existing Flume Conditions Evaluation
- 1.4 Existing Mechanical System Evaluation
- 1.5 Available Electrical Power Evaluation
- 1.6 Coordination Meeting

### **Task 2.0 Design Document Development (30%)**

- 2.1 Existing Facilities/Structures Layout
- 2.2 Preliminary Flume Cover Layout
- 2.3 Preliminary Mechanical System Concept
- 2.4 Preliminary Electrical Diagram
- 2.5 QA/QC
- 2.6 Review Meeting

### **Task 3.0 Design Document Development (60%)**

- 3.1 Design Drawings
- 3.2 Technical Specifications
- 3.3 QA/QC
- 3.4 Review Meeting

### **Task 4.0 Final Design Document Development**

- 4.1 Final Design Drawings Stamped and Signed by an Arizona Professional Engineer
- 4.2 Technical Specifications
- 4.3 Opinion of Probable Cost
- 4.4 QA/QC
- 4.5 Review Meeting

### **Task 5.0 Bid Assistance**

- 5.1 Bid Assistance
- 5.2 Pre-Bid Meeting

- All review submittals will be half size scale 11"x17" and electronic PDF (Drawings and Specifications); 6 hard copies, 1 electronic in CD format.
- Final submittal, after Mylar cover sheet approved and signed by City Engineer, will be 24"x36" (3 mil Mylar), electronic PDF (Drawings, Engineers Estimate Probable Cost, and Specifications), and AutoCAD Files. 6 hard copies, 1 electronic in CD format.

KS



Mr. Ken Snow  
December 19, 2014  
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**TP-01, TP-04 & TP05 Metering Stations Modifications  
Drawings List**

		<b>30%</b>	<b>60%</b>	<b>Final</b>
<b>General</b>				
G-1	Cover & Drawing Index	X	X	X
G-2	TP-01 General Facility Layout	X	X	X
G-3	TP-04 General Facility Layout	X	X	X
G-4	TP-05 General Facility Layout	X	X	X
<b>Structural</b>				
S-1	Structural General Notes		X	X
S-2	Structural Standard Details		X	X
S-3	TP-01 Structural Plan & Sections	X	X	X
S-4	TP-04 Structural Plan & Sections	X	X	X
S-5	TP-05 Structural Plan & Sections	X	X	X
S-6	Structural Flume Cover Details 1		X	X
S-7	Structural Flume Cover Details 2		X	X
<b>Building Mechanical</b>				
M-1	Mechanical General Notes & Schedules		X	X
M-2	TP-01 Mechanical Plan & Section	X	X	X
M-3	TP-04 Mechanical Plan & Section	X	X	X
M-4	TP-05 Mechanical Plan & Section	X	X	X
M-5	Mechanical Details		X	X
<b>Electrical</b>				
E-1	Electrical Symbols and Abbreviations		X	X
E-2	TP-01 Electrical One-line & Modification Plan	X	X	X
E-3	TP-04 Electrical One-line & Modification Plan	X	X	X
E-4	TP-05 Electrical One-line & Modification Plan	X	X	X
E-5	Electrical Details		X	X
	<b>Total</b>	<b>14</b>	<b>21</b>	<b>21</b>

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## 2. Project Team and Organization

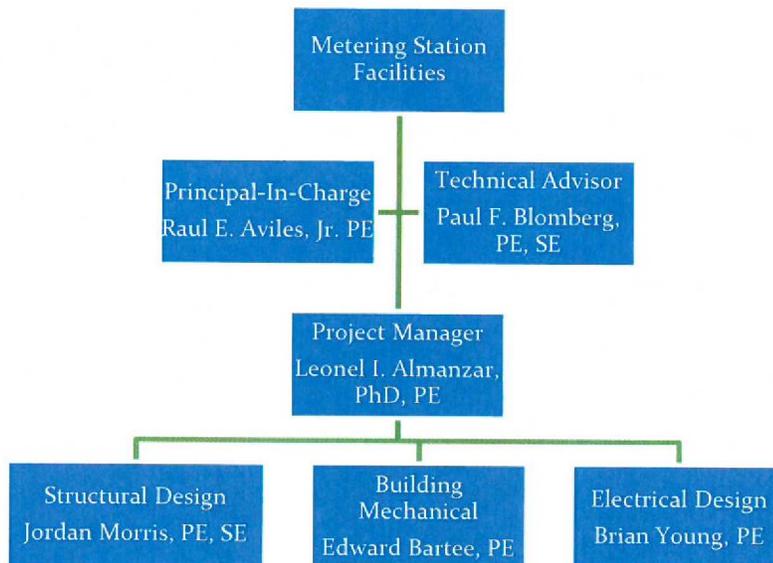
### CDM Smith - A Reputation Founded on Exceptional Client Service

CDM Smith is a leading provider of consulting, engineering, construction and operations services, headquartered in Cambridge, Massachusetts, with a multi-disciplinary staff of about 5,500 in more than 100 offices worldwide. CDM Smith has a committed team of fifty architects and engineers in the Phoenix office that work together to deliver solutions specific to the City of Tempe.

### Organization Chart

Our project organization is a simple structure with clearly defined reporting lines, roles, responsibilities, and assignments. Leonel Almanzar will manage the project team, serving as the single point of contact for the City. He will be responsible for communications, project budget, schedule, quality assurance, and deliverables.

Presented below is CDM Smith's organization chart depicting the lines of communication and the roles of each professional.



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#### 4. Assumptions

- Adequate power is available in the facilities for the new equipment
- Demolition work shown using photographs.
- Main existing structure system does not require retrofit or new code redesign
- Plumbing or Fire Protection design not included
- Heating or Cooling not required
- No automatic controls are needed.
- Services during construction not included
- Inspection during construction not included
- Facility building code analysis not required
- Use of MAG specifications with City of Tempe amendments
- Front end bid documents to be prepared by the City with CDM Smith assistance
- TP-05 facility was not available during site visit, it is assumed to be similar to TP-04 scope of work
- Upgrade/replacement of existing supply fans is not included.
- No energy or pay-back analysis is required.

#### 5. Management Control Program

The project will be executed by CDM Smith under the direction of Raul E. Aviles, PE, serving as Principal-in-Charge, and Dr. Leonel I. Almanzar serving as the Project Manager. Mr. Aviles's role will ensure that all of CDM Smith's quality management practices, budget, and schedule are adhered to and the appropriate personnel are dedicated to this project. Dr. Almanzar's role will oversee the day-to-day execution of the project by coordinating the work of CDM Smith's staff and communicating project status and issues to the City of Tempe. Dr. Almanzar will communicate the progress of the project on a monthly basis. In addition to managing the design portion of the project, we will work with you in managing the total project, including procurement, construction, and operation to meet all project goals.

A handwritten signature in blue ink, appearing to be "KSS".



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## Cost and Schedule Control Methodology

Dr. Almanzar will use CDM Smith's computer-based Project Management Control System consisting of numerous tools and reports to control all elements of project costs. This produces monthly reports that provide accurate, complete, up-to-date information that will aid Dr. Almanzar in effectively tracking the progress of project tasks, and to identify early any deviations to planned budget and schedule so that corrective actions can be implemented. Clear and timely decisions are critical to project progress and avoiding rework that is often associated with budget overruns and schedule delays. CDM Smith will manage the engineering and project scope by informing the City of Tempe of pending and actual decisions. We will use a decision log as a tool to document the impact of a decision on capital cost, engineering cost, operation cost, and schedule. The City will benefit by avoiding cost creep and by knowing the impact of a decision early in the project.

## Proposed Project Status Reporting System

At the beginning of the project, CDM Smith will develop a cost and resource loaded schedule to track project progress and keep the project on schedule and budget. These tools will enable Dr. Almanzar to quickly compare CDM Smith's progress against cost. Any deviation between the two will be quickly addressed. This information will also be provided to the City's staff in the project meetings and progress reports. Our tools will identify issues early and mitigate surprises to the City's Project Manager(s), as well as any impacts to the project scope, schedule, or budget.

## Quality Control

Overarching all of these systems is CDM Smith's commitment to quality to assure that the City is satisfied with the end result. Procedures for maintaining quality include:

- A project kick-off meeting with the City and key CDM Smith team members.
- Personal commitment by all team members to provide high quality products.
- Internal cross checking and coordination procedures on all deliverables.

KSS



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### 4. Proposed Schedule

CDM estimates the time from inception through preparation of the design package will be approximately ten weeks, exclusive of City of Tempe review time. Schedule is presented in table below.

TASK	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14 - Week 25
Task 1.0 Data Collection & Evaluation														
Task 2.0 Design Document Development (30%)														
City Review														
Task 3.0 Design Document Development (60%)														
City Review														
Task 4.0 Final Design Document Development														
Final Submittal														
Task 5.0 Bid Assistance														

### 5. Project Fee

CDM Smith proposes to complete the above scope of work for an Hourly N. T. E. amount of \$140,790 for Tasks No.1 to No.5: Design Services and Bidding Assistance (See Hourly distribution below). CDM Smith also proposes to include in the contract allowance for expenses, based on time and materials, for the amount of \$500, and a contingency amount of \$7,040. The total proposed contract amount is \$148,330.

Proposed personnel are included in the table below; any future modification will be submitted for City approval.

Personnel	Billing Category
Raul Aviles	Principal
Leonel Almanzar	Project Manager
Paul Blomberg	Principal
Brian Young	Project Engineer
Edward Barte	Project Engineer
Jordan Morris	Project Engineer
Alan Hahn	Project Engineer
Todd Adams	Project Engineer
Ronnie Chu	Engineer
John Lee	Engineer
Thang Nguyen	Engineer
Audrey Johnson	Designer
Gregory Collins	Drafter
Kanika Ray	Drafter
Frances Campbell	Admin
Barbara Bellerose	Admin
Marlene McKenzie	Admin

KSS



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IMPROVEMENTS OF TP-01, TP-04 & TP-05 METERING STATIONS  
 CITY OF TEMPE CIP: \_\_\_\_\_  
 EXHIBIT A - FEE MATRIX

TASK	TASK DESCRIPTION	A/E FIRM							Total Man Hours	Total Fee
		Principal \$220	Project Manager \$180	Project Engineer \$150	Engineer \$120	Designer \$105	Drafter \$100	Admin \$75		
<b>Task 1.0 Data Collection</b>										
1.1	Scoping and Kick-off Meeting	2	2					2	6	\$950
1.2	Data Collection/Record Research and Review		8	16	16			4	48	\$6,540
1.3	Existing Flume Conditions Evaluation		4	8	8				20	\$2,920
1.4	Existing Mechanical System Evaluation		4	8	8				20	\$2,920
1.5	Available Electrical Power Evaluation		4	8	8				20	\$2,920
1.6	Coordination meetings		8	8					16	\$2,640
	LABOR SUBTOTAL	2	30	48	40	0	4	6	130	\$18,890
	EXPENSES									\$100
	SUBTOTAL									\$18,990
<b>Task 2.0 Design and Development (30%)</b>										
2.1	Existing Facilities/Structures Layout		2	4	8			8	22	\$2,760
2.2	Preliminary Flume Cover Layout		4	16	16			8	44	\$5,920
2.3	Preliminary Mechanical System Concept		4	16	16			8	44	\$5,920
2.4	Preliminary Electrical Diagram		4	16	16			8	44	\$5,920
2.5	QA/QC	8	8	24				8	48	\$7,600
2.6	Review Meetings	2	8	18				4	32	\$4,880
	LABOR SUBTOTAL	10	28	90	48	0	32	4	212	\$33,000
	EXPENSES									\$100
	SUBTOTAL									\$33,100
<b>TASK 3.0 Design Document Development (60%)</b>										
3.1	Design Drawings		12	40	48			48	148	\$18,960
3.2	Technical Specifications		8	18	18			8	52	\$6,990
3.3	QA/QC	8	8	24				8	48	\$7,400
3.4	Review Meetings	2	8	18				4	32	\$4,880
	LABOR SUBTOTAL	10	36	100	66	0	48	20	280	\$38,230
	EXPENSES									\$100
	SUBTOTAL									\$38,330
<b>Task 4.0 Final Design Document Development</b>										
4.1	Final Design Drawings		12	30	36			36	114	\$14,760
4.2	Technical Specifications		8	12	12			8	40	\$5,340
4.3	Opinion of Probable Cost		4	16	16				36	\$5,120
4.4	Review Meetings	2	8	18				4	32	\$4,880
4.5	QA/QC	8	8	24				4	44	\$7,100
	LABOR SUBTOTAL	10	40	100	64	0	36	16	266	\$37,200
	EXPENSES									\$100
	SUBTOTAL									\$37,300
<b>Task 5.0 BID Assistance</b>										
4.1	Bid Assistance	3	20	20				4	47	\$7,560
4.2	Pre-Bid Meeting	3	15	15				4	37	\$5,910
	LABOR SUBTOTAL	6	35	35	0	0	0	8	84	\$13,470
	EXPENSES									\$100
	SUBTOTAL									\$13,570

<b>TOTAL FEE</b>			
Labor cost	Amount of	\$140,790	for Design - N.T.E
	Allowance of	\$500	for Expenses - T & M
	Allowance of	\$7,040	for (5% Contingency - N.T.E.)
TOTAL		\$148,330	Total Contract Amount

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# Leonel I. Almanzar, PhD, PE, SECB

## Principal Project Manager

Dr. Almanzar has 20 years of experience in analysis, design and preparation of preliminary plans and final contract plans and in the management of construction services for water/wastewater treatment facilities, dams and transportation structures. Dr. Almanzar also has extensive experience in value engineering, design-build projects, project legal litigations, project scheduling and cost management functions.

### Water/Wastewater

**Project Team Leader, JR Simplot Process Water Treatment and Return Plant (PWTRP), Idaho, 2012.** Dr. Almanzar served as project team leader during design of the design-build (D-B) project. The project includes the design of a Process Water Treatment and Return Plant (PWTRP) for process water generated by a new potato production facility in Caldwell, Idaho. The PWTRP will use MBR secondary treatment comprised of a biological nutrient removal (BNR) and aerobic activated sludge with ultrafiltration membranes that will treat the entire process water flow. Additional treatment through reverse osmosis (RO) and chemical conditioning will be provided to treat the return water to deliver effluent that meets land application requirements and drinking water quality return water to the production facility.

**Lead Structural Engineer, Vander Lans Expansion, Water Replenishment District, Long Beach, California.** For the Water Replenishment District, Mr. Almanzar served as the task leader for the expansion of the existing Leo Vander Lans Water Treatment Facility (LVLWTF) from 3-mgd to 8-mgd. The LVLWTF includes treatment of Title 22 e as effluent using MF, RO, and advanced oxidation with UV/peroxide. The expansion also includes provisions for reducing waste discharge by adding 3<sup>rd</sup> stage RO and backwash waste recovery from the MF system. As structural task leader, Mr. Almanzar was responsible for the structural design for this project.

#### Experience Highlights

- Wastewater Treatment Facility
- 3D/4D Project Development
- Design Build Projects
- Project Management

**Project Team Leader, Livingston Water Innovation and Energy Facility (LWINE), California, 2011.** Dr. Almanzar served as project team leader and lead structural engineer during the preliminary design of a wastewater treatment plant to treat effluent from the Distillery, Winery and main sump and pomace to meet the effluent criteria for chemical oxygen demand (COD), biochemical oxygen demand (BOD5), total suspended solids (TSS), ammonia and total Kjeldahl nitrogen (TKN). The main liquid/solids treatment facilities include, screening, dissolved air floatation (DAF), high rate anaerobic digester (HRAD), low rate anaerobic digester (LRAD), moving bed biofilm reactor (MBBR), and clarification.

**Project Team Leader, Camp Pendleton P-1043 NRTTP – Northern Region Tertiary Treatment Plant, California, 2010-2011 to Present.** Dr. Almanzar served as project team leader and lead structural engineer during design of the design-build (D-B) project. The P-1043 (NRTTP) project includes the design and construction of a tertiary treatment plant for an annual average daily flow (AADF) of 4.0 mgd to meet the effluent permit limits

### Education

Ph.D. – Civil Engineering,  
University of Puerto  
Rico, 1998

M.S. - Civil Engineering,  
University of Puerto  
Rico, 1994

B.S. - Civil Engineering,  
Technical Institute of  
Santo Domingo, 1990

### Registration

Professional Engineer:  
Alabama, Arizona,  
California, Dominican  
Republic, Florida (2007),  
Massachusetts, North  
Carolina, Puerto Rico,  
South Carolina.

NCEES – 38757

SECB – Certified in the  
Practice of Structural  
Engineering

for biochemical oxygen demand (BOD), total suspended solids (TSS), and total nitrogen (TN). The facility is being constructed adjacent to the existing STP-11 site on the area which was the former STP-11 effluent percolation basin area. The main liquid treatment facilities include, influent pumping, screening, grit removal, sequencing batch reactors (SBRs), filtration, disinfection and effluent pumping. The solids treatment/handling facilities include waste activated sludge thickening, aerobic sludge digestion, sludge dewatering, and biosolids storage. In addition, an extensive solar power generation system was built on the NRTTP site and surrounding area.

**Lead Structural Engineer, Camp Pendleton P-1041 SRTTP – Southern Region Tertiary Treatment Plant Expansion, California, 2010-2011 to Present.** Dr. Almanzar served as lead structural engineer during design of the design-build (D-B) project. The P-1041 (SRTTP) project includes the design and construction of the expansion of a tertiary treatment plant from 5.0 mgd to 7.5 mgd annual average daily flow (AADF) to meet the effluent permit limits for biochemical oxygen demand (BOD), total suspended solids (TSS), and total nitrogen (TN). The new facilities will build closely upon the existing design. The main liquid treatment facilities include, influent pumping, screening, sequencing batch reactors (SBRs), filtration and disinfection. The solids treatment/handling facilities include waste activated sludge thickening, aerobic sludge digestion, sludge dewatering, and biosolids storage. In addition, an extensive solar power generation system was built on the SRTTP site and surrounding area.

**Project Team Leader and Lead Structural Engineer, Camp Pendleton P-113 Advanced Water Treatment (AWT) Facility, California, 2010-2011.** Dr. Almanzar served as project team leader and lead structural engineer during design of the design-build (D-B) project. The facility includes reverse osmosis/control building, chemical containments with canopy, clearwell tank, pump stations, and miscellaneous foundations.

**Structural Engineer, Florence Regional Wastewater Management Facility – Contract 2, City of Florence, South Carolina, 2009 to 2010.** Dr. Almanzar served as structural engineer during final design of the project. The facility includes several buildings, where a comprehensive vibration analysis was performed for 3 story reinforced concrete solids processing building where four centrifuges were located in the building second floor.

**Structural Engineer, Ormond Beach Wastewater Treatment Plant Expansion, City of Ormond Beach, Florida, 2009.** Dr. Almanzar served as structural engineer during final design of the project. The expansion includes structural rehabilitation of anoxic tank, new pump station, clarifiers, filters, chlorine contact tanks, and several buildings.

## Transportation

**Bridge Design Manager, USAID EL Salvador Tropical Storm Ida Reconstruction Project, EL Salvador, 2011-present.** Dr. Almanzar was the bridge design manager responsible for overseeing structural engineering sub-consultants of the project. This component includes studies, preliminary bridge design, and tendering documents for six bridges in El Salvador affected by the Tropical Storm Ida.

**Bridge Design Manager, Extension of the Nguyen Tri Phuong Road and Southern Link Road, Da Nang Priority Infrastructure Investment Project (DN-PIIP), Da Nang, Vietnam, 2009-2011.** Dr. Almanzar was the bridge design manager responsible to oversee structural engineering sub-consultants of the project. This component included

road and bridge works for the extension of Nguyen Tri Phuong Road and Southern Link Road between Highway 1A and Tran Dai Nghia Road. These consist of Nguyen Tri Phuong bridge, Khue Dong bridge and Tung Lam Bridge, and Nguyen Tri Phuong road.

### Civil Engineering Projects

**Structural Engineer, Suffolk County Outfall Replacement Tunnel, 2010 to Present.** Dr. Almanzar was the lead structural engineer during the segmental tunnel lining design of the project. 2D and 3D structural models were performed using finite element analysis and soil structure interaction.

### Professional Activities

Fellow Member, American Society of Civil Engineers (ASCE)

Fellow Member, Structural Engineer Institute (SEI)

Associate Member, ASCE 7 Main Committee

Member, ASCE Membership National Committee

Member, PR College of Engineers (CIAPR)

Member, DR College of Engineers (CODIA)

### Publications

Almanzar, L. "Design Parameters Sensitivity Analyses of Precast Concrete Segmental Tunnel Liners." North American Tunneling (NAT) Conference, June 2012.

Almanzar, L. "Understanding Partial Contraction Joints in Liquid Containing Structures." ASCE Structural Congress, March 2012.

Almanzar, L. "Understanding Wall/Slab Moment and Shear Transfer in Liquid Containing Structures." ASCE Structural Congress, April 2011.

Almanzar, L. "Foundations Subjected to Vibration Loads: A Practical Design Tool for Sizing Equipment Mats." Concrete International (ACI), July 2009.

Almanzar, L. "Bridge Design Comparison using AASHTO LFD & LRFD." Paper presented at the 17th Conference on Applied Mechanics, 2006.

Almanzar, L. "Carraizo Dam Spillway Gate Rehabilitation." United States Society on Dams (USSD) Conference, 2002.

Almanzar, L. "Post- Buckling and first ply failure of thin-walled frames and columns made of composite materials." In Thin-Walled Structures: Research and Development, Ed. S. Shanmugam et al., Elsevier, Oxford. 297-303, 1998.

Almanzar, L. "Design Sensitivity of Composite Materials Structures." A thesis submitted in partial fulfillment of the requirements for the degree of Philosophy Doctor in Civil Engineering, 1998.

Almanzar, L. "Design Sensitivity under Buckling Mode Interaction." Paper presented at the 12th Engineering Mechanics Conference, ASCE, La Jolla, California, May 17-20, 1998.

Almanzar, L. "Composite Materials for Structural Elements: Buckling and Sensitivity." Paper presented at the 1st Forum for the Promotion of Engineering Research in Puerto Rico (FoPER'98), Mayaguez, Puerto Rico, 1998.

Almanzar, L. "First Ply Failure of Buckled Composite Structural Elements." Build to Last - 2nd ed., ASCE, 3-10, 1997.

Almanzar, L. "Design Sensitivity of Buckled Thin-Walled Composite Structural Elements." Applied Mechanics Review, ASME, 50(11):3-10, 1997.

Almanzar, L. "Failure of Post-Buckled Thin-Walled Composite Columns." Paper presented at the ASCE Structural Congress. Portland, Oregon, 1997.

Almanzar, L. "Design Sensitivity of Buckling and Post-Buckling States." Paper presented at the Pan-America Conference in Applied Mechanics, PACAM V, San Juan, Puerto Rico, 1997.

Almanzar, L. "Buckling in Composite Columns." Paper presented at SIGMA XI Student Poster Day, Mayaguez, Puerto Rico, 1996.

Almanzar, L. "Improving Design in Composite Thin-Walled Columns." 11th ASCE Conference, University of Central Florida, Fort Lauderdale, 1996.

Almanzar, L. "Buckling and Post-Buckling of Composite Columns." Eighth Puerto Rico EPSCoR Annual Conference. Ponce, Puerto Rico, 1996.

Almanzar, L. "Design Sensitivity in Equilibrium Problems Containing Singularities." Computing Research Conference. UPR-Mayaguez, 1996.

Almanzar, L. "Numerical Techniques to Model Structural Changes in Plate Structures." Paper presented at the Seventh Puerto Rico EPSCoR Annual Conference, Dorado, Puerto Rico, 1995.

Almanzar, L. "Structural Evaluation of Medium-Rise Reinforced Concrete Buildings in Seismic Zones." Paper presented at the Twenty ninth ACS Junior Technical Meeting & Fourteenth Interdisciplinary Scientific Meeting of Puerto Rico, Mayaguez, Puerto Rico, 1994.

Almanzar, L. "Computer-Aided Structural Evaluation of Medium-Rise Reinforced Concrete Buildings in Seismic Zones." A thesis submitted in partial fulfillment of the requirements for the degree Master of Science in Civil Engineering, 1994.

Almanzar, L. "UPR-BUILD User Manual." Civil Infrastructure Research Center (CIRC) Publication, UPR-Mayaguez, 1994.

Almanzar, L. "Computer-Aided Structural Evaluation of Medium-Rise Reinforced Concrete Buildings in Seismic Zones." Sixth Puerto Rico EPSCoR Annual Conference, San Juan, Puerto Rico, 1994.

Almanzar, L. "Application of Advanced Analysis Methods to the Evaluation of Multi-Story Buildings." Fifth Puerto Rico EPSCoR Annual conference, UPR-Mayaguez, 1993.

**EXHIBIT B**  
**AFFIDAVIT DEMONSTRATING LAWFUL**  
**PRESENCE IN THE UNITED STATES**

ARS §§1-501 and 502 require completion of the form to apply to the City for a local public benefit (defined as a grant, contract or loan). You must demonstrate through the presentation of one of the following documents that you are lawfully present in the United States.

**LAWFUL PRESENCE IN THE UNITED STATES CAN BE DEMONSTRATED BY**  
**PRESENTATION OF ONE (1) OF THE DOCUMENTS LISTED BELOW.**

Please present the document indicated below to the City. If mailing the document, attach a copy of the document to this Affidavit. (If the document may not be copied, present the document in person to the City for review and signing of the affidavit.)

- \_\_\_\_\_ 1. An Arizona driver license issued after 1996.  
Print first 4 numbers/letters from license: \_\_\_\_\_
- \_\_\_\_\_ 2. An Arizona non-operating identification License.  
Print first 4 numbers/letters: \_\_\_\_\_
- \_\_\_\_\_ 3. A birth certificate or delayed birth certificate issued in any state, territory or possession of the United States.  
Year of birth: \_\_\_\_\_; Place of birth: \_\_\_\_\_
- \_\_\_\_\_ 4. A United States Certificate of Birth abroad.  
Year of birth: \_\_\_\_\_; Place of birth: \_\_\_\_\_
- \_\_\_\_\_ 5. A United States passport.  
Print first 4 numbers/letters on Passport: \_\_\_\_\_
- \_\_\_\_\_ 6. A foreign passport with a United States Visa.  
Print first 4 numbers/letters on Passport \_\_\_\_\_  
Print first 4 numbers/letters on Visa \_\_\_\_\_
- \_\_\_\_\_ 7. An I-94 form with a photograph.  
Print first 4 numbers on I-94: \_\_\_\_\_
- \_\_\_\_\_ 8. **A United States Citizenship and Immigration Services Employment Authorization Document (EAD).**  
Print first 4 numbers/letters on EAD: \_\_\_\_\_
- \_\_\_\_\_ 9. **Refugee travel document.**  
Date of Issuance: \_\_\_\_\_ Refugee Country: \_\_\_\_\_
- \_\_\_\_\_ 10. **A United States Certificate of Naturalization.**  
Print first 4 digits of CIS Reg. No.: \_\_\_\_\_
- \_\_\_\_\_ 11. **A United States Certificate of Citizenship.**  
Date of Issuance: \_\_\_\_\_ Place of Issuance: \_\_\_\_\_
- \_\_\_\_\_ 12. **A tribal Certificate of Indian Blood.**  
Date of Issuance: \_\_\_\_\_ Name of Tribe: \_\_\_\_\_
- \_\_\_\_\_ 13. **A tribal or Bureau of Indian Affairs Affidavit of Birth.**  
Year of Birth: \_\_\_\_\_ Place of Birth: \_\_\_\_\_

**I DO SWEAR OR AFFIRM UNDER PENALTY OF LAW THAT I AM LAWFULLY PRESENT IN THE UNITED STATES AND THAT THE DOCUMENT I PRESENTED ABOVE AS VERIFICATION IS TRUE.**

Signature	Business/Company (if applicable)
Print Name	Address
Date: _____	City, State, Zip Code

OFFICE USE ONLY: EMPLOYEE NAME: \_\_\_\_\_  
EMPLOYEE NUMBER: \_\_\_\_\_

**ALL VIOLATIONS OF FEDERAL IMMIGRATION LAW SHALL BE REPORTED TO 1-866-347-2423.**



**EXHIBIT C**  
**AFFIDAVIT OF COMPLIANCE WITH TEMPE CITY CODE**  
**CHAPTER 2 ARTICLE VIII SECTION 2-603(5)**

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Per Tempe City Code Chapter 2 Article VIII Section 2-603(5), it is unlawful for a City vendor or City contractor, because of race, color, gender, gender identity, sexual orientation, religion, national origin, familial status, age, disability, or United States military veteran status, to refuse to hire or employ or bar or discharge from employment any person, or to discriminate against such person in compensation, conditions, or privileges of employment.

City vendors and contractors shall provide a copy of their antidiscrimination policy to City to confirm compliance with this requirement or attest in writing to compliance.

- CONTRACTOR means any person who has a contract with the City.
- VENDOR means a person or firm in the business of selling or otherwise providing products, materials, or services.

CONTRACTOR/VENDOR, select one:

\_\_\_\_\_ Current copy of antidiscrimination policy attached

OR

\_\_\_\_\_ I hereby certify \_\_\_\_\_ (contractor/vendor) to be in compliance with Tempe City Code Chapter 2 Article VIII Section 2-603(5).

\_\_\_\_\_  
Signature

Date: \_\_\_\_\_

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

CITY OF TEMPE  
TEMPE, ARIZONA  
DEPARTMENT OF PUBLIC WORKS

AFFIDAVIT OF GENERAL CONTRACTOR / PRIME CONSULTANT  
REGARDING  
HEALTH INSURANCE

\_\_\_\_\_,  
Arizona

Date \_\_\_\_\_

**TP-01, TP-04, and TP-05 Metering Station Improvements  
Project No. 3202551**

I hereby certify that \_\_\_\_\_ (name of company) currently has, and all of its major subcontractors/subconsultants, defined as doing work in excess of \$30,000.00, will have, during the course of this contract, health insurance for all employees working on this project and will offer health insurance coverage to eligible dependents of such employees, as defined in the accompanying Guidelines. The company's health insurance is as follows:

Name of Insurance Company: \_\_\_\_\_

Type of Insurance (PPO, HMO, POS, INDEMNITY): \_\_\_\_\_

Policy No.: \_\_\_\_\_

Policy Effective Date (MM/DD/YY): \_\_\_\_\_

Policy Expiration Date (MM/DD/YY): \_\_\_\_\_

Signed and dated at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

\_\_\_\_\_  
General Contractor/Prime Consultant

By: \_\_\_\_\_

STATE OF ARIZONA            )  
  ) ss  
COUNTY OF MARICOPA        )

SUBSCRIBED AND SWORN to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

\_\_\_\_\_  
Notary Public

My commission expires:  
  
\_\_\_\_\_

## **City of Tempe Guidelines for Implementation of Health Insurance**

These Guidelines are provided for purposes of implementing Resolution No. 2000.73, which requires all employees of prime consultants, general contractors and major subconsultants and subcontractors to have health insurance and to offer health insurance to their eligible dependants, as determined at the start of each project. Questions regarding these guidelines should be directed to the City of Tempe Engineering Division at (480) 350-8200.

1. All Prime Consultants who enter into a Public Works contract or General Contractors who bid on Public Works projects that are advertised for bid and enter into a contract in excess of \$30,000 with the City of Tempe after January 1, 2001, are required to sign an affidavit in the form attached hereto. The prime consultant or general contractor shall require that all major subconsultants or subcontractors, defined as entities doing work in excess of \$30,000, comply with the health insurance requirements. In signing the affidavit, prime consultants and general contractors may refer to and rely upon these Guidelines for interpretation.
2. Health insurance is required for permanent employees who work for the consultant/contractor more than one hundred and twenty (120) days in any calendar year. A "work day" consists of any time within a twenty-four hour period, regardless of number of hours that the individual is paid. This requirement excludes students working part-time who are enrolled in a recognized educational institution. Many companies have a grace period or a qualifying period prior to commencement of insurance coverage, which is acceptable so long as the employee coverage begins by the 120<sup>th</sup> day of contract signing. Temporary employees will be covered to the same extent as the City of Tempe covers temporary employees as determined at the start of each project.
3. If a contractor is a "Union" shop and withholds union dues from employees for health insurance coverage that is also offered to their eligible dependents and meets all City requirements, the Contractor may so note on the required affidavit.
4. The health insurance requirements herein apply to all employees that are directly involved with the City of Tempe project including support and administrative personnel.
5. Health insurance coverage must be maintained during the entire time of the contract, including any warranty periods, with the City.
6. All complaints concerning violations of the health insurance requirements shall be filed by an employee, in writing, with the Public Works Department, within thirty (30) days from discovery of the violation. An administrative hearing will be held before the Public Works Director, and a written decision of findings will be provided to the parties to the hearing within ten (10) days thereafter. Appeal from the decision

of the Public Works Director may be made within ten (10) days of the date of the decision by filing a notice of appeal in writing with the Public Works Department. If an appeal is timely filed, an administrative hearing will be held before an administrative hearing officer appointed by the City Manager. The decision of the administrative hearing officer shall be final.

7. In the event of a finding by the City of a violation of the insurance provisions, the company in violation of the provision shall be barred from bidding on, or entering into, any public works contract with the City for a minimum period of three (3) years.
8. All consultants and contractors subject to the health insurance requirements shall post, in English and Spanish, notice of the health insurance requirements at their office and at the job site. Signs for posting will be provided by the City.

These "Guidelines for Implementation of Health Insurance", issued and dated this 21st day of August, 2002, hereby amend all guidelines previously issued.